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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

394 papers	9,508 citations	47 h-index	81 g-index
413 ext. papers	10,044 ext. citations	3.3 avg, IF	6.08 L-index

#	Paper	IF	Citations
394	Electronic and atomic structure, and magnetism of transition-metal clusters. <i>Chemical Reviews</i> , 2000 , 100, 637-78	68.1	451
393	Improved Charge Transfer at Carbon Nanotube Electrodes. <i>Advanced Materials</i> , 1999 , 11, 154-157	24	435
392	Nonlocal approximation to the exchange potential and kinetic energy of an inhomogeneous electron gas. <i>Physical Review B</i> , 1978 , 17, 3735-3743	3.3	275
391	Density functional study of adsorption of molecular hydrogen on graphene layers. <i>Journal of Chemical Physics</i> , 2000 , 112, 8114-8119	3.9	229
390	Selective propene epoxidation on immobilized au(6-10) clusters: the effect of hydrogen and water on activity and selectivity. <i>Angewandte Chemie - International Edition</i> , 2009 , 48, 1467-71	16.4	224
389	Enhancement of hydrogen physisorption on graphene and carbon nanotubes by Li doping. <i>Journal of Chemical Physics</i> , 2005 , 123, 204721	3.9	217
388	Interaction of molecular and atomic hydrogen with (5,5) and (6,6) single-wall carbon nanotubes. <i>Journal of Chemical Physics</i> , 2002 , 117, 2281-2288	3.9	184
387	Interaction of lithium with graphene: An ab initio study. <i>Physical Review B</i> , 2004 , 70,	3.3	157
386	Ab Initio Photoabsorption Spectra and Structures of Small Semiconductor and Metal Clusters. <i>Physical Review Letters</i> , 1996 , 77, 247-250	7.4	156
385	The optimum average nanopore size for hydrogen storage in carbon nanoporous materials. <i>Carbon</i> , 2007 , 45, 2649-2658	10.4	149
384	Determination of the glass-forming concentration range in binary alloys from a semiempirical theory: Application to Zr-based alloys. <i>Physical Review B</i> , 1987 , 36, 3716-3722	3.3	126
383	Molecular-dynamics study of the binding energy and melting of transition-metal clusters. <i>Physical Review B</i> , 1993 , 48, 8253-8262	3.3	122
382	Excited states dynamics in time-dependent density functional theory. <i>European Physical Journal D</i> , 2004 , 28, 211-218	1.3	114
381	Structural and dynamical properties of Cu ₂ Au bimetallic clusters. <i>Journal of Chemical Physics</i> , 1996 , 104, 1056-1066	3.9	111
380	Theoretical study of the transition from planar to three-dimensional structures of palladium clusters supported on graphene. <i>Physical Review B</i> , 2010 , 81,	3.3	110
379	Novel polygonized single-wall carbon nanotube bundles. <i>Physical Review Letters</i> , 2001 , 86, 3056-9	7.4	107
378	Size-dependent selectivity and activity of silver nanoclusters in the partial oxidation of propylene to propylene oxide and acrolein: A joint experimental and theoretical study. <i>Catalysis Today</i> , 2011 , 160, 116-130	5.3	102

- 377 Prediction of amorphous alloy formation by ion beam mixing. *Solid State Communications*, **1983**, 48, 765-767 101
- 376 Ab initio study of B32 clusters: competition between spherical, quasiplanar and tubular isomers. *Chemical Physics Letters*, **1999**, 311, 21-28 2.5 99
- 375 Molecular-dynamics study of the structures, binding energies, and melting of clusters of fcc transition and noble metals using the Voter and Chen version of the embedded-atom model. *Physical Review B*, **1994**, 49, 8495-8498 3.3 91
- 374 Construction of free-energy diagrams of amorphous alloys. *Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics*, **1990**, 12, 587-595 89
- 373 A non-local approximation to the exchange energy of the non-homogeneous electron gas. *Solid State Communications*, **1977**, 24, 135-138 1.6 87
- 372 Adsorption and Dissociation of Molecular Hydrogen on Palladium Clusters Supported on Graphene. *Journal of Physical Chemistry C*, **2012**, 116, 21179-21189 3.8 86
- 371 From graphene oxide to pristine graphene: revealing the inner workings of the full structural restoration. *Nanoscale*, **2015**, 7, 2374-90 7.7 83
- 370 Electronic and atomic structure of Na, Mg, Al and Pb clusters. *Zeitschrift Für Physik D-Atoms Molecules and Clusters*, **1988**, 11, 163-174 83
- 369 Density functional calculations of hydrogen adsorption on boron nanotubes and boron sheets. *Nanotechnology*, **2006**, 17, 778-785 3.4 78
- 368 Glass formation in ternary transition metal alloys. *Journal of Physics Condensed Matter*, **1990**, 2, 6245-6250 73
- 367 Synthesis of fullerenes. *Journal of Physical Organic Chemistry*, **2013**, 26, 526-539 2.1 68
- 366 Chemical Properties of Small Au Clusters: An Analysis of the Local Site Reactivity. *Journal of Physical Chemistry C*, **2007**, 111, 6668-6677 3.8 68
- 365 Prediction of solid solubility in alloys. *Physical Review B*, **1980**, 22, 5583-5589 3.3 68
- 364 Magnetic moments of Ni clusters. *Physical Review B*, **1998**, 57, 12469-12475 3.3 67
- 363 Orbital-free molecular dynamics simulations of melting in Na8 and Na20: Melting in steps. *Journal of Chemical Physics*, **1999**, 111, 6026-6035 3.9 67
- 362 Structure and Properties of Atomic Nanoclusters **2005**, 66
- 361 Palladium Clusters Anchored on Graphene Vacancies and Their Effect on the Reversible Adsorption of Hydrogen. *Journal of Physical Chemistry C*, **2014**, 118, 5081-5090 3.8 60
- 360 Structure and bonding in small neutral alkali halide clusters. *Physical Review B*, **1997**, 56, 15353-15360 3.3 60

- 359 Simulation of the hydrogen storage in nanoporous carbons with different pore shapes. *International Journal of Hydrogen Energy*, **2011**, 36, 10748-10759 6.7 58
- 358 Molecular-dynamics study of the structural rearrangements of Cu and Au clusters softly deposited on a Cu(001) surface. *Physical Review B*, **1999**, 60, 2908-2915 3.3 55
- 357 Stability and magic numbers of hetero-atomic clusters of simple metals. *Physica B: Condensed Matter*, **1988**, 154, 73-81 2.8 54
- 356 Analysis of the bonding and reactivity of H and the Al₁₃ cluster using density functional concepts. *Journal of Chemical Physics*, **2003**, 119, 5128-5141 3.9 53
- 355 Melting in Large Sodium Clusters: An Orbital-Free Molecular Dynamics Study. *Journal of Physical Chemistry B*, **2001**, 105, 2386-2392 3.4 52
- 354 Molecular-dynamics study of the structure, binding energy, and melting of small clusters of fullerene molecules using Girifalco's spherical model. *Physical Review B*, **1994**, 49, 8491-8494 3.3 52
- 353 Can optical spectroscopy directly elucidate the ground state of C₂₀? *Journal of Chemical Physics*, **2002**, 116, 1930-1933 3.9 51
- 352 Hydrogen storage in pure and Li-doped carbon nanopores: combined effects of concavity and doping. *Journal of Chemical Physics*, **2008**, 128, 144704 3.9 50
- 351 Density functional study of molecular hydrogen coverage on carbon nanotubes. *Computational Materials Science*, **2006**, 35, 238-242 3.2 50
- 350 Glass formation in binary alloy systems: A prediction of the composition range. *Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties*, **1988**, 58, 79-92 50
- 349 Interaction and concerted diffusion of lithium in a (5,5) carbon nanotube. *Physical Review B*, **2008**, 78, 3.3 48
- 348 Semiempirical Theory of Solid Solubility in Transition Metal Alloys. *Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences*, **1985**, 40, 1199-1205 1.4 48
- 347 Geometrical effects on the magnetism of small Ni clusters. *Physical Review B*, **1997**, 55, 13279-13282 3.3 47
- 346 Hydrogen storage capacities of nanoporous carbon calculated by density functional and Møller-Plesset methods. *Physical Review B*, **2008**, 78, 3.3 46
- 345 Influence of nonlocal exchange-correlation effects on the response properties of simple metal clusters. *Physical Review B*, **1992**, 46, 4891-4898 3.3 46
- 344 Density-functional calculation of the fragmentation of doubly ionized spherical jelliumlike metallic microparticles. *Physical Review B*, **1986**, 34, 2152-2157 3.3 46
- 343 Theoretical study of icosahedral Ni clusters within the embedded-atom method. *Physical Review B*, **1996**, 54, 5961-5969 3.3 45
- 342 Prediction of the glass formation range of transition metal alloys. *Journal of Physics F: Metal Physics*, **1988**, 18, 2149-2157 45

341	Electronegativity scale for metals. <i>Physical Review B</i> , 1979 , 19, 3889-3895	3.3	45
340	Patching and tearing single-wall carbon-nanotube ropes into multiwall carbon nanotubes. <i>Physical Review Letters</i> , 2002 , 89, 255501	7.4	44
339	Embedded-atom method applied to bimetallic clusters: The Cu-Ni and Cu-Pd systems. <i>Physical Review B</i> , 1994 , 49, 16649-16658	3.3	44
338	Glass-forming ability in binary alloys produced by ion beam mixing and by laser quenching. <i>Materials Letters</i> , 1986 , 4, 316-319	3.3	43
337	Controlling the Adsorption of Carbon Monoxide on Platinum Clusters by Dopant-Induced Electronic Structure Modification. <i>Angewandte Chemie - International Edition</i> , 2016 , 55, 11059-63	16.4	43
336	Clusters and layers of C60 molecules supported on a graphite substrate. <i>Physical Review B</i> , 1997 , 55, 7190-7197	3.3	42
335	Half-metallic finite zigzag single-walled carbon nanotubes from first principles. <i>Physical Review B</i> , 2008 , 78,	3.3	42
334	Response properties of sodium clusters within a jellium-like model with finite surface thickness. <i>Zeitschrift für Physik D-Atoms Molecules and Clusters</i> , 1991 , 19, 93-96		42
333	A theoretical study of the static structure and thermodynamics of liquid lithium. <i>Journal of Physics Condensed Matter</i> , 1993 , 5, 4283-4298	1.8	41
332	An Application of Non-Extensive Statistical Mechanics to Nanosystems. <i>Journal of Computational and Theoretical Nanoscience</i> , 2004 , 1, 227-229	0.3	40
331	Weighted-density exchange and local-density Coulomb correlation energy functionals for finite systems: Application to atoms. <i>Physical Review A</i> , 1993 , 48, 4197-4212	2.6	39
330	Coulomb barriers in the dissociation of doubly charged clusters. <i>Physical Review B</i> , 1991 , 43, 9459-9466	3.3	39
329	Charge transfer and heat of formation in CsCl intermetallic compounds. <i>Journal of Physics and Chemistry of Solids</i> , 1978 , 39, 79-87	3.9	39
328	Nonlocality and the energy of alloy formation. <i>Journal of Physics F: Metal Physics</i> , 1978 , 8, 2455-2460		39
327	Competition between molecular and dissociative adsorption of hydrogen on palladium clusters deposited on defective graphene. <i>RSC Advances</i> , 2015 , 5, 47945-47953	3.7	37
326	Structural and thermal properties of silicon-doped fullerenes. <i>Journal of Chemical Physics</i> , 2003 , 119, 1127-1135	3.9	37
325	Optical to ultraviolet spectra of sandwiches of benzene and transition metal atoms: Time dependent density functional theory and many-body calculations. <i>Journal of Chemical Physics</i> , 2010 , 132, 044314	3.9	35
324	Scattering of a proton with the Li4 cluster: Non-adiabatic molecular dynamics description based on time-dependent density-functional theory. <i>Chemical Physics</i> , 2012 , 399, 130-134	2.3	34

323	Adsorption of Lithium on Finite Graphitic Clusters. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 939-941	3.8	34
322	Structural and thermal stability of narrow and short carbon nanotubes and nanostrips. <i>Carbon</i> , 2005 , 43, 1371-1377	10.4	34
321	Tight binding molecular dynamics studies of boron assisted nanotube growth. <i>Journal of Chemical Physics</i> , 2000 , 113, 3814-3821	3.9	34
320	Ab initio calculations of structures and stabilities of (NaI) _n Na ⁺ and (CsI) _n Cs ⁺ cluster ions. <i>Physical Review B</i> , 1998 , 58, 9972-9979	3.3	34
319	Comparative ab initio studies of small tin and lead clusters. <i>Annalen Der Physik</i> , 1998 , 7, 107-119	2.6	34
318	Theoretical study of the photoabsorption spectrum of Na ₈ , Na ₂₀ , Cs ₈ , and Cs ₁₀₀ clusters. <i>Physical Review B</i> , 1992 , 45, 13657-13663	3.3	34
317	Theoretical study of the stability of AgN ₂ ⁺ , AgN, AgN ₂ ⁻ and NaN ₂ ⁻ clusters as a function of size using the density functional formalism. <i>Chemical Physics</i> , 1988 , 120, 239-247	2.3	34
316	Simulated porosity and electronic structure of nanoporous carbons. <i>Journal of Chemical Physics</i> , 2011 , 135, 104706	3.9	33
315	On the Factors Controlling Glass Forming Ability of Metallic Alloys Formed by Fast Liquid Quenching. <i>Physica Status Solidi A</i> , 1984 , 81, 55-61		33
314	The Atomic Size-Mismatch Contribution to the Enthalpy of Formation of Concentrated Substitutional Metallic Solid Solutions. <i>Physica Status Solidi A</i> , 1984 , 85, 423-428		32
313	Is Spillover Relevant for Hydrogen Adsorption and Storage in Porous Carbons Doped with Palladium Nanoparticles?. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 17357-17364	3.8	32
312	Simulating the thermal behavior and fragmentation mechanisms of exohedral and substitutional silicon-doped C ₆₀ . <i>Journal of Chemical Physics</i> , 2005 , 123, 204323	3.9	31
311	Calculation of metastable free-energy diagrams and glass formation in the Mg ₂ Ti ₃ alloy and its boundary binaries using the Miedema model. <i>Intermetallics</i> , 2006 , 14, 297-307	3.5	31
310	Adsorption and growth of palladium clusters on graphdiyne. <i>Physical Chemistry Chemical Physics</i> , 2017 , 19, 19094-19102	3.6	30
309	Magic numbers of sodium clusters. <i>Solid State Communications</i> , 1986 , 57, 85-88	1.6	30
308	Simulation of hydrogen storage in porous carbons. <i>Journal of Materials Research</i> , 2013 , 28, 589-604	2.5	28
307	Surface plasmon excitations in C ₆₀ , C ₆₀ K and C ₆₀ H clusters. <i>Physica B: Condensed Matter</i> , 1993 , 183, 247-263	2.8	28
306	Equivalence of ionization potential and magnitude of chemical potential in Hartree-Fock theory of atoms. <i>Journal of Chemical Physics</i> , 1983 , 78, 1382-1383	3.9	28

305	Thermal road for fullerene annealing. <i>Chemical Physics Letters</i> , 1997 , 273, 367-370	2.5	27
304	The interaction of sulfuric acid with graphene and formation of adsorbed crystals. <i>Nanotechnology</i> , 2007 , 18, 485705	3.4	27
303	Interaction of molecular and atomic hydrogen with single-wall carbon nanotubes. <i>IEEE Nanotechnology Magazine</i> , 2004 , 3, 304-310	2.6	27
302	Melting behavior of large disordered sodium clusters. <i>European Physical Journal D</i> , 2001 , 15, 221-227	1.3	27
301	Atomic structure and segregation in alkali-metal heteroclusters. <i>Physical Review B</i> , 1990 , 42, 5000-5008	3.3	26
300	Surface energy of liquid metals at the melting temperature related to bulk liquid structure. <i>Surface Science</i> , 1985 , 160, 509-516	1.8	26
299	Theoretical Study of Small (Na) _n Clusters. <i>Journal of Physical Chemistry B</i> , 1997 , 101, 5944-5950	3.4	24
298	Long-Range van der Waals Interactions in Density Functional Theory. <i>Theoretical Chemistry Accounts</i> , 2007 , 117, 467-472	1.9	24
297	Simulating the thermal stability and phase changes of small carbon clusters and fullerenes. <i>European Physical Journal D</i> , 1999 , 6, 221-233	1.3	24
296	Theoretical Models for the Optical Properties of Clusters and Nanostructures. <i>International Journal of Modern Physics B</i> , 1997 , 11, 2727-2776	1.1	23
295	Adsorption of hydrogen on normal and pentaheptite single wall carbon nanotubes. <i>European Physical Journal D</i> , 2005 , 34, 279-282	1.3	23
294	Controlling the Adsorption of Carbon Monoxide on Platinum Clusters by Dopant-Induced Electronic Structure Modification. <i>Angewandte Chemie</i> , 2016 , 128, 11225-11229	3.6	22
293	Theoretical study of molecular hydrogen clusters. <i>European Physical Journal D</i> , 2007 , 43, 61-64	1.3	22
292	Buckling in boron sheets and nanotubes. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2006 , 203, 1105-1110	1.6	22
291	Nonthermal fragmentation of C ₆₀ . <i>Chemical Physics Letters</i> , 2002 , 352, 154-162	2.5	22
290	Conditions for the self-assembling of cluster materials. <i>Nanotechnology</i> , 2002 , 13, 253-257	3.4	22
289	Metastable phase stability in the ternary Zr-Be-Cr system. <i>Intermetallics</i> , 2002 , 10, 205-216	3.5	22
288	Dissociation channels of NaN ⁺ clusters (3). <i>Physical Review B</i> , 1990 , 41, 5595-5601	3.3	22

287	Charge transfer in binary alloys and to impurities in iron. <i>Journal of Physics and Chemistry of Solids</i> , 1977 , 38, 869-876	3.9	22
286	Tailoring structural and electronic properties of RuO ₂ nanotubes: a many-body approach and electronic transport. <i>Physical Chemistry Chemical Physics</i> , 2013 , 15, 14715-22	3.6	21
285	Deformations and thermal stability of carbon nanotube ropes. <i>IEEE Nanotechnology Magazine</i> , 2004 , 3, 230-236	2.6	21
284	Tight-binding study of the ionization of iron clusters. <i>Physical Review B</i> , 1996 , 54, 3003-3006	3.3	21
283	A molecular dynamics study of the evaporation of small argon clusters. <i>Physica B: Condensed Matter</i> , 1992 , 179, 273-277	2.8	21
282	Electronic and cohesive properties of small sodium particles. <i>Surface Science</i> , 1983 , 127, 367-376	1.8	21
281	Atomic electronegativity from density functional theory. <i>Journal of Chemical Physics</i> , 1980 , 73, 1313-1319	3.9	21
280	Prediction of solid solubility in alloys. Application to noble metal based alloys. <i>Acta Metallurgica</i> , 1982 , 30, 105-107		21
279	Gradient corrections in the energy density functional. <i>Chemical Physics Letters</i> , 1978 , 53, 190-191	2.5	21
278	Searching for DFT-based methods that include dispersion interactions to calculate the physisorption of H on benzene and graphene. <i>Journal of Chemical Physics</i> , 2017 , 146, 214104	3.9	20
277	First-Principles Structural and Electronic Characterization of Ordered SiO ₂ Nanowires. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 18973-18982	3.8	20
276	Structure and energetics of Nan-xLi _x (n = 1-4). <i>Physical Review B</i> , 1990 , 41, 5636-5642	3.3	20
275	Calculation of the Band Gap Energy and Study of Cross Luminescence in Alkaline-Earth Dihalide Crystals. <i>Journal of the Physical Society of Japan</i> , 1999 , 68, 2829-2835	1.5	19
274	Theoretical study of the binding of Na clusters encapsulated in the C ₂₄₀ fullerene. <i>Physical Review B</i> , 1996 , 53, 16059-16066	3.3	19
273	Non-local exchange and local Coulomb correlation energy density functionals for finite many-electron systems. <i>Chemical Physics Letters</i> , 1993 , 205, 348-353	2.5	19
272	Density functional study of neutral and charged sodium and lead clusters in the jellium model. <i>Physica B: Condensed Matter</i> , 1990 , 167, 19-32	2.8	19
271	On the electronegativity parameters of the theory of heats of alloy formation. <i>Solid State Communications</i> , 1979 , 31, 9-14	1.6	19
270	Nonlocal exchange and kinetic energy density functionals with correct asymptotic behavior for electronic systems. <i>International Journal of Quantum Chemistry</i> , 1994 , 49, 171-184	2.1	18

269	Evolution of the structural stability of large Cu, Ni, Pd, and Ag clusters with size: An analysis within the embedded atom method. <i>Journal of Cluster Science</i> , 1994 , 5, 287-302	3	18
268	Theoretical study of (NaCl) _n clusters. <i>Physica B: Condensed Matter</i> , 1995 , 212, 329-342	2.8	18
267	Inhomogeneous contraction of interatomic distances in metallic clusters: Calculations for Cs _n and OCs _n . <i>Physical Review B</i> , 1991 , 44, 7273-7282	3.3	18
266	Immersion of hydrogen atoms in aluminium clusters. <i>Zeitschrift Für Physik D-Atoms Molecules and Clusters</i> , 1989 , 13, 269-275		18
265	New insights on the reaction mechanisms for CO oxidation on Au catalysts. <i>Chemical Physics Letters</i> , 2009 , 468, 201-204	2.5	17
264	Nonmetal-metal transition in Ni clusters. <i>Solid State Communications</i> , 1997 , 104, 635-639	1.6	17
263	Computer simulation of cluster assembling. <i>International Journal of Quantum Chemistry</i> , 2002 , 86, 226-238		17
262	Dissociation of doubly charged alkali metal clusters. <i>Annalen Der Physik</i> , 1992 , 504, 270-280	2.6	17
261	Electronegativity of positive ions in the density functional theory. <i>Zeitschrift Für Physik A</i> , 1982 , 305, 31-37		17
260	Optical Properties of Nanostructures from Time-Dependent Density Functional Theory. <i>Journal of Computational and Theoretical Nanoscience</i> , 2004 , 1, 231-255	0.3	17
259	Steric and chemical effects on the hydrogen adsorption and dissociation on free and graphene-supported palladium clusters. <i>Computational and Theoretical Chemistry</i> , 2017 , 1107, 23-29	2	16
258	Ab initio studies of propene epoxidation on oxidized silver surfaces. <i>Physical Chemistry Chemical Physics</i> , 2014 , 16, 26546-52	3.6	16
257	Assembling of hydrogenated aluminum clusters. <i>European Physical Journal D</i> , 2001 , 16, 285-288	1.3	16
256	Electron density in simple metals. Relation to bulk and surface properties. <i>Journal of Physics F: Metal Physics</i> , 1980 , 10, 1995-2008		16
255	Theoretical study of the adsorption of hydrogen on cobalt clusters. <i>Physical Chemistry Chemical Physics</i> , 2018 , 20, 21163-21176	3.6	15
254	Ab initio calculations for mixed clusters of lead and alkali elements, and implications for the structure of their solid and liquid alloys. <i>Chemical Physics Letters</i> , 1998 , 289, 451-456	2.5	15
253	Electronic and atomic structure of the Al(n)H(n+2) clusters. <i>Journal of Chemical Physics</i> , 2008 , 129, 074306	0.6	15
252	Fragmentation and Coulomb explosion of deuterium clusters by the interaction with intense laser pulses. <i>Physical Review A</i> , 2005 , 72,	2.6	15

251	Correlation energies of light atoms related to pairing between antiparallel spin electrons. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2003 , 36, 2695-2705	1.3	15
250	Amorphization in GdCo alloys and multilayers. <i>Journal of Physics Condensed Matter</i> , 2002 , 14, 8913-8924	1.8	15
249	Electronic structure of negatively charged aluminium clusters. <i>Physica B: Condensed Matter</i> , 1991 , 168, 32-38	2.8	15
248	One-Electron Energy Eigenvalues in the Weighted-Density Approximation to Exchange and Correlation. <i>Europhysics Letters</i> , 1991 , 14, 323-329	1.6	15
247	Polarizabilities of aluminium clusters. <i>Solid State Communications</i> , 1990 , 75, 139-142	1.6	15
246	Semiempirical theory of solid solubility in metallic alloys. <i>Physica Status Solidi A</i> , 1983 , 76, 675-682		15
245	Volume of formation and electronic configuration in dilute alloys. <i>Journal of Physics and Chemistry of Solids</i> , 1979 , 40, 449-455	3.9	15
244	Density functional-pseudopotential approach to the heat of formation in alloys of alkali metals. <i>Journal of Physics F: Metal Physics</i> , 1981 , 11, 2045-2053		15
243	Theory of the heat of formation in homovalent disordered solid alloys of non-transition metals. <i>Journal of Physics F: Metal Physics</i> , 1982 , 12, 1907-1921		15
242	Semi-empirical study of metastable alloys produced by ion implantation in metals. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 1982 , 45, 713-722		15
241	Structure and Properties of Atomic Nanoclusters 2011 ,		15
240	Magnetic moments of. <i>European Physical Journal D</i> , 1999 , 6, 235	1.3	15
239	Interaction of the Charged Deuterium Cluster D ₃ ⁺ with Femtosecond Laser Pulses. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 17765-17772	3.8	14
238	Photoabsorption spectra of Ti ₈ C ₁₂ metallocarbohedrynes: Theoretical spectroscopy within time-dependent density functional theory. <i>Journal of Chemical Physics</i> , 2006 , 125, 074311	3.9	14
237	Deformed-jellium model for the fission of multiply charged simple metal clusters. <i>Physical Review B</i> , 1995 , 51, 1897-1901	3.3	14
236	Self-consistent local-density approximation with model Coulomb pair-correlation functions for electronic systems. <i>Physical Review A</i> , 1993 , 47, 1811-1816	2.6	14
235	Theoretical study of NaCl clusters. <i>Zeitschrift für Physik D-Atoms Molecules and Clusters</i> , 1993 , 26, 213-215		14
234	Electronic structure of CsN and CsNO clusters. <i>Solid State Communications</i> , 1989 , 71, 591-594	1.6	14

233	X-ray scattering factors of crystalline silicon and germanium from A bond charge model. <i>Journal of Physics and Chemistry of Solids</i> , 1988 , 49, 1013-1017	3.9	14
232	Competition between Palladium Clusters and Hydrogen to Saturate Graphene Vacancies. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 10843-10850	3.8	13
231	Lifetime of electronic excitations in metal nanoparticles. <i>New Journal of Physics</i> , 2010 , 12, 053023	2.9	13
230	Observation of Zr ₂ (2+), Cd ₂ (2+), Hf ₂ (2+), W ₂ (2+), and Pt ₂ (2+) in the gas phase. <i>Journal of Chemical Physics</i> , 2009 , 130, 144312	3.9	13
229	Lattice distortions around a Tl ⁺ impurity in NaI:Tl ⁺ and CsI:Tl ⁺ scintillators: An ab initio study involving large active clusters. <i>Physical Review B</i> , 1998 , 58, 11964-11969	3.3	13
228	Shape of the hydrogen adsorption regions of MOF-5 and its impact on the hydrogen storage capacity. <i>Physical Review B</i> , 2008 , 78,	3.3	13
227	Two-parameter partially correlated ground-state electron density of some light spherical atoms from Hartree-Fock theory with nonintegral nuclear charge. <i>Physical Review A</i> , 2007 , 75,	2.6	13
226	Stability of silicon-doped C ₆₀ dimers. <i>Journal of Chemical Physics</i> , 2007 , 126, 044705	3.9	13
225	Nonlocal exchange- and kinetic-energy density functionals for electronic systems: Application to atoms and ions. <i>Physical Review A</i> , 1993 , 47, 1804-1810	2.6	13
224	Collective electronic excitations in metal-coated C ₆₀ . <i>Physical Review B</i> , 1994 , 49, 17397-17402	3.3	13
223	Coulomb explosion of charged jellium clusters. <i>Zeitschrift für Physik D-Atoms Molecules and Clusters</i> , 1989 , 11, 323-326		13
222	Adsorption and dissociation of molecular hydrogen on the edges of graphene nanoribbons. <i>Journal of Nanoparticle Research</i> , 2012 , 14, 1	2.3	12
221	Modeling of the functionalization of single-wall carbon nanotubes towards its solubilization in an aqueous medium. <i>European Physical Journal D</i> , 2011 , 61, 381-388	1.3	12
220	Surfactant effect of sulfuric acid on the exfoliation of bilayer graphene. <i>Physical Review B</i> , 2011 , 84,	3.3	12
219	Theoretical study of the photoabsorption spectrum of small chromium clusters. <i>Physical Review B</i> , 2007 , 76,	3.3	12
218	Charging mechanism for the bond elongation observed in suspended chains of gold atoms. <i>Physical Review B</i> , 2005 , 72,	3.3	12
217	An experimental and theoretical study of the glass-forming region of the Mg-Cu-Sn system. <i>Journal of Materials Science</i> , 1995 , 30, 40-46	4.3	12
216	Dissociation energy of alkali metal clusters related to inhomogeneous electron gas theory. <i>Molecular Physics</i> , 1993 , 79, 393-403	1.7	12

- 215 Distribution of interatomic distances in large metallic clusters. *Zeitschrift Für Physik D-Atoms Molecules and Clusters*, **1992**, 22, 541-545 12
- 214 Nonlocal density functional calculation of the electron affinity of atoms. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **1986**, 114, 236-240 2.3 12
- 213 Charge transfer in simple metallic alloys. *Journal De Physique*, **1983**, 44, 229-234 12
- 212 Local behavior of the kinetic energy in density functional theory. *International Journal of Quantum Chemistry*, **1985**, 27, 393-406 2.1 12
- 211 Partial Pressure Contributions to the Equation of State of Alkali Metals. *Physica Status Solidi (B): Basic Research*, **1980**, 100, 701-704 1.3 12
- 210 Semiempirical calculation of the surface dipole barrier in metals. *Solid State Communications*, **1980**, 33, 59-62 1.6 12
- 209 A Combined Experimental and Theoretical Investigation of Atomic-Scale Defects Produced on Graphite Surfaces by Dielectric Barrier Discharge Plasma Treatment. *Journal of Physical Chemistry C*, **2009**, 113, 18719-18729 3.8 11
- 208 Atomic structure of metallic clusters of large size. *The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties*, **1994**, 69, 1045-1050 11
- 207 On the Concentration Dependence of the Ordering Potential in Liquid Li-Pb Alloys. *Physics and Chemistry of Liquids*, **1987**, 16, 249-258 1.5 11
- 206 Stability and magic numbers of small KxMg clusters. *Journal of Physics F: Metal Physics*, **1987**, 17, L197-L200 11
- 205 Density Functional theory of the atomic electronegativity. *Zeitschrift Für Physik A*, **1981**, 302, 307-310 11
- 204 Volume Dependence of the Bulk Modulus in Alkali Metals. *Physica Status Solidi (B): Basic Research*, **1981**, 104, 307-312 1.3 11
- 203 A non local approximation to the correlation energy of inhomogeneous electron systems. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **1981**, 81, 467-469 2.3 11
- 202 Semi-statistical model for metals. *Journal of Physics and Chemistry of Solids*, **1977**, 38, 307-310 3.9 11
- 201 Ab initio studies of ethanol dehydrogenation at binary AuPd nanocatalysts. *Molecular Catalysis*, **2018**, 449, 8-13 3.3 10
- 200 Variation of the ground-state correlation energy of atoms with atomic number. *Journal of Physics B: Atomic, Molecular and Optical Physics*, **1996**, 29, 1629-1636 1.3 10
- 199 Molecular dynamics study of cluster impact on the (001) and (110) surfaces of fcc metals. *Computational Materials Science*, **2000**, 17, 515-519 3.2 10
- 198 Exchange and correlation in density functional theory. *International Journal of Quantum Chemistry*, **1995**, 56, 49-59 2.1 10

197	Glass formation in the Cu ₄₀ Zr system and its associated binary systems. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , 1992 , 65, 989-1000		10
196	Atomic structure and collective excitations of medium size NanKm clusters. <i>Zeitschrift für Physik D-Atoms Molecules and Clusters</i> , 1993 , 28, 311-319		10
195	Possibility of spontaneous vitrification in Ti-Cr alloys. <i>Physica B: Condensed Matter</i> , 1989 , 160, 108-112	2.8	10
194	Cohesive energy of small metallic particles. <i>Solid State Communications</i> , 1984 , 50, 549-552	1.6	10
193	Electronic and elastic effects in the interaction of impurities in ternary metallic alloys. <i>Journal of Physics and Chemistry of Solids</i> , 1985 , 46, 1147-1151	3.9	10
192	Theory of the thermodynamic properties of binary mixtures of organic molecules with size mismatch. <i>Chemical Physics</i> , 1985 , 99, 35-41	2.3	10
191	A theory of order-Disorder and antiphase domain boundary energies. <i>Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science</i> , 1980 , 11, 1747-1753		10
190	Non-monotonic behaviour with concentration of the surface tension of certain binary liquid alloys. <i>Physics and Chemistry of Liquids</i> , 2008 , 46, 522-526	1.5	9
189	Structural corrections to Stokes-Einstein relation for liquid metals near freezing. <i>Physical Review E</i> , 2006 , 73, 032201	2.4	9
188	Calculation of the optical spectrum of the Ti ₈ C ₁₂ and V ₈ C ₁₂ Met-Cars. <i>Chemical Physics Letters</i> , 2004 , 398, 292-296	2.5	9
187	Thermodynamic analysis of irradiation-induced amorphization of intermetallic particles in Zircaloy. <i>Journal of Materials Science</i> , 1995 , 30, 196-200	4.3	9
186	Stabilities of large sodium clusters for different atomic arrangements. <i>Physical Review B</i> , 1993 , 47, 4747-4755	3.3	9
185	Ionization potentials of atoms calculated with a nonlocal exchange and a local correlation functional. <i>International Journal of Quantum Chemistry</i> , 1994 , 52, 993-1010	2.1	9
184	Nonlocal exchange and kinetic-energy density functionals for electronic systems. <i>International Journal of Quantum Chemistry</i> , 1992 , 44, 347-358	2.1	9
183	Theoretical calculation of the amorphous alloy range of the Mg-Cu system. <i>Journal of Materials Science</i> , 1992 , 27, 4935-4939	4.3	9
182	Nonlocal approximation to the exchange and kinetic energy functionals: Application to metallic clusters. <i>International Journal of Quantum Chemistry</i> , 1993 , 45, 333-347	2.1	9
181	Surface Energy of Liquid Transition Metals Related to Bulk Compressibility and Thickness. <i>Physics and Chemistry of Liquids</i> , 1987 , 17, 209-214	1.5	9
180	Electronegativity equalization and electron transfer in molecules. <i>Molecular Physics</i> , 1983 , 48, 981-988	1.7	9

179	Manipulating the Magnetic Moment of Palladium Clusters by Adsorption and Dissociation of Molecular Hydrogen. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 20756-20762	3.8	8
178	Interaction of Surfactants Containing a Sulfuric Group with a (5,5) Carbon Nanotube. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 17249-17256	3.8	8
177	Comparative ab initio studies of small tin and lead clusters. <i>Annalen Der Physik</i> , 1998 , 510, 107-119	2.6	8
176	Building alkali-lead intermetallic compounds from clusters. <i>Solid State Communications</i> , 1998 , 108, 519-524	2.4	8
175	Optical Absorption Spectra of V+4 Isomers: One Example of First-Principles Theoretical Spectroscopy with Time-Dependent Density Functional Theory. <i>Journal of Computational and Theoretical Nanoscience</i> , 2006 , 3, 761-766	0.3	8
174	Coulomb explosion of deuterium cationic clusters. <i>Physical Review A</i> , 2003 , 68,	2.6	8
173	Computer simulation of the spreading of metallic clusters landing at grazing incidence on a metallic surface. <i>Physical Review B</i> , 2000 , 62, 16031-16039	3.3	8
172	Lowest excitation energy in atoms in the adiabatic approximation related to the single-particle kinetic energy functional. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 1999 , 32, 2173-2179	1.3	8
171	Relation between transport and thermodynamic properties in liquid sp-electron metals near freezing. <i>Physical Review E</i> , 1999 , 60, 4125-9	2.4	8
170	Assembling alkali-lead solid compounds from clusters. <i>Journal of Chemical Physics</i> , 1999 , 111, 7053-7061	3.9	8
169	Free-energies of the Ti-Ni, Fe-Ni and Mo-Ni alloys in relation to their behaviour under particle irradiation. <i>Journal of Materials Science</i> , 1996 , 31, 6395-6402	4.3	8
168	Theoretical study of gas-phase Na _n Pb clusters and implications for liquid Na _n Pb alloys. <i>Journal of Chemical Physics</i> , 1996 , 104, 8043-8047	3.9	8
167	Barrier for the reaction X ₂ O ⁺⁺ +X ₂ O ⁺⁺ →X ₄ O ₂ ⁺ in alkali-metal clusters related to electron density at the bond midpoint of the supermolecule (X ₂ O ⁺) ₂ . <i>Physical Review B</i> , 1994 , 49, 5565-5569	3.3	8
166	Density functional calculation of the photoabsorption spectrum of simple metal clusters: Beyond the local-density approximation and jellium model. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , 1994 , 69, 1037-1044		8
165	Electronic and atomic structure of Cs _n N and Cs _n N O clusters. <i>Zeitschrift Für Physik D-Atoms Molecules and Clusters</i> , 1990 , 17, 203-208		8
164	A non local density functional calculation of the diamagnetic susceptibilities and other electronic properties of noble gases and closed-shell ions. <i>Zeitschrift Für Physik D-Atoms Molecules and Clusters</i> , 1987 , 6, 219-226		8
163	Density functional calculation of the ionization potentials of small metallic particles. <i>European Physical Journal B</i> , 1985 , 59, 187-191	1.2	8
162	Study of an approximate relation between the energy of an atom and the electronic potential at the nucleus. <i>International Journal of Quantum Chemistry</i> , 1982 , 22, 989-997	2.1	8

161	An improved descriptor of cluster stability: application to small carbon clusters. <i>Physical Chemistry Chemical Physics</i> , 2018 , 20, 27368-27374	3.6	8
160	Interaction of aromatic molecules with small gold clusters. <i>Chemical Physics Letters</i> , 2017 , 684, 91-96	2.5	7
159	Dynamics of Cluster Isomerization Induced by Hydrogen Adsorption. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 15236-15243	3.8	7
158	Electronic and magnetic properties of Fe clusters inside finite zigzag single-wall carbon nanotubes. <i>Physical Review B</i> , 2013 , 87,	3.3	7
157	Theoretical study of the reactivity of cesium with benzene and graphitic C(x)H(y) clusters. <i>Journal of Chemical Physics</i> , 2005 , 123, 074303	3.9	7
156	Growth Ability and Stability Indices of Clusters. <i>Journal of Cluster Science</i> , 2003 , 14, 31-47	3	7
155	Tight binding studies of exohedral silicon doped C60. <i>Composites Science and Technology</i> , 2003 , 63, 1499-1505	3.5	7
154	Theoretical evidence of bound metastable states in the doubly ionized nickel dimer Ni ²²⁺ . <i>Chemical Physics Letters</i> , 2000 , 332, 481-486	2.5	7
153	Ab initio calculation of the lattice distortions induced by substitutional Ag and Cu impurities in alkali halide crystals. <i>Physical Review B</i> , 2000 , 62, 3086-3092	3.3	7
152	Structure, transport and surface properties of dense fluids, especially liquid metals. <i>Molecular Physics</i> , 1998 , 95, 353-361	1.7	7
151	Incipient manifestation of the shell structure of atoms within the WDA model for the exchange and kinetic energy density functionals. <i>Chemical Physics</i> , 1995 , 196, 455-463	2.3	7
150	Charge transfer within zintl ions in liquid metallic alloys. A cluster study. <i>Computational and Theoretical Chemistry</i> , 1995 , 330, 267-272		7
149	Theoretical study of the collective electronic excitations in single- and multiple-shell fullerenes. <i>Physical Review B</i> , 1995 , 52, 8446-8453	3.3	7
148	Enrichment and segregation in alkali heteroclusters. <i>Zeitschrift für Physik D-Atoms Molecules and Clusters</i> , 1989 , 12, 237-239		7
147	Surface Thickness of Liquid Metals Related to Surface Energy and Bulk Compressibility: A Universal Relation. <i>Physics and Chemistry of Liquids</i> , 1990 , 21, 257-259	1.5	7
146	Simple charge transfer model of X-ray scattering by ten-electron molecules. <i>Molecular Physics</i> , 1983 , 50, 789-796	1.7	7
145	Nanoalloys of Metals Which Do Not Form Bulk Alloys: The Case of Ag-Co. <i>Journal of Physical Chemistry A</i> , 2020 , 124, 6468-6477	2.8	7
144	Cathodoluminescence in single and multiwall WS ₂ nanotubes: Evidence for quantum confinement and strain effect. <i>Applied Physics Reviews</i> , 2020 , 7, 041401	17.3	7

143	The Diels-Alder Cycloaddition Reaction of Substituted Hemifullerenes with 1,3-Butadiene: Effect of Electron-Donating and Electron-Withdrawing Substituents. <i>Molecules</i> , 2016 , 21, 200	4.8	7
142	Ultra-stable nanofluid containing Functionalized-Carbon Dots for heat transfer enhancement in Water/Ethylene glycol systems: Experimental and DFT studies. <i>Energy Reports</i> , 2021 , 7, 4222-4234	4.6	7
141	Transcending Lindemann's predictions for the melting temperatures of metals and for the long-wavelength limit of their liquid structure factors. <i>Philosophical Magazine Letters</i> , 2009 , 89, 300-305 ¹		6
140	Thermal behaviour of carbon clusters and small fullerenes. <i>Zeitschrift für Physik D-Atoms Molecules and Clusters</i> , 1997 , 40, 385-388		6
139	Study of clusters of interest for liquid ionic alloys. <i>Annalen Der Physik</i> , 1997 , 509, 35-44	2.6	6
138	Ionization potentials of neutral atoms and positive ions in the limit of large atomic number. <i>Physical Review A</i> , 2007 , 75,	2.6	6
137	Exchange energy density and some approximate exchange potentials obtained from Hartree-Fock theory of the ground state of the Be atom. <i>Chemical Physics Letters</i> , 2001 , 343, 166-170	2.5	6
136	Vibrational frequencies of sodium clusters. <i>International Journal of Quantum Chemistry</i> , 1995 , 56, 589-601.	2.1	6
135	Density functional theory of the collective electronic excitations in Na _n clusters. <i>International Journal of Quantum Chemistry</i> , 1995 , 56, 839-846	2.1	6
134	Density functional theory of clusters of nontransition metals using simple models. <i>Topics in Current Chemistry</i> , 1996 , 119-171		6
133	Atomic and electronic structure of Na ₁₀ K ₁₀ Cs _n clusters. <i>Zeitschrift für Physik D-Atoms Molecules and Clusters</i> , 1994 , 30, 349-356		6
132	Fission barriers for Na ²⁺ + N cluster dissociation. <i>Zeitschrift für Physik D-Atoms Molecules and Clusters</i> , 1994 , 31, 275-277		6
131	Density functional theory of the structure of bimetallic clusters. <i>Physica Scripta</i> , 1994 , T55, 177-182	2.6	6
130	Stability of isomeric Na _n clusters. <i>Zeitschrift für Physik D-Atoms Molecules and Clusters</i> , 1991 , 19, 141-143		6
129	Simple density functional theory of the electronegativity and other related properties of atoms and ions 1987 , 41-78		6
128	Density functional estimates of charge transfer and chemical potentials in hydrogen halides and mixed halides. <i>Chemical Physics</i> , 1983 , 76, 121-124	2.3	6
127	Concentration dependence of the heat of formation of binary liquid alloys. <i>Physica B: Physics of Condensed Matter & C: Atomic, Molecular and Plasma Physics, Optics</i> , 1983 , 122, 23-27		6
126	Semiempirical Study of Metastable Alloys Obtained by Ion Implantation in Metals and Semiconductors. <i>Physica Status Solidi A</i> , 1982 , 72, 777-781		6

125	Electronegativity of fractionally charged atoms in the Density Functional Theory. <i>Zeitschrift für Physik A</i> , 1983 , 312, 95-98		6
124	Effects of van der Waals interactions on the structure and stability of Cu _{8-x} Pd _x (x = 0, 4, 8) cluster isomers. <i>Materials Today Communications</i> , 2021 , 26, 102024	2.5	6
123	H ₂ Adsorption on Cu _{4-x} M _x (M = Au, Pt; x = 0-4) Clusters: Similarities and Differences As Predicted by Density Functional Theory. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 30768-30780	3.8	6
122	Growth of fullerene fragments using the Diels-Alder cycloaddition reaction: first step towards a C ₆₀ synthesis by dimerization. <i>Molecules</i> , 2013 , 18, 2243-54	4.8	5
121	Fractal network dimension determining the relation between the strength of bulk metallic glasses and the glass transition temperature. <i>Applied Physics Letters</i> , 2009 , 95, 021909	3.4	5
120	The diatomic dication CuZn ²⁺ in the gas phase. <i>Journal of Chemical Physics</i> , 2011 , 135, 034306	3.9	5
119	Ionic vibrational breathing mode of metallic clusters. <i>International Journal of Quantum Chemistry</i> , 1997 , 61, 613-626	2.1	5
118	Interaction of narrow carbon nanotubes with nitronium tetrafluoroborate salts. <i>Journal of Chemical Physics</i> , 2008 , 128, 214703	3.9	5
117	Mechanism of amorphisation in Cu ₃ Bu, a binary alloy with a positive heat of mixing. <i>Physics and Chemistry of Liquids</i> , 2008 , 46, 669-675	1.5	5
116	Electronic metastable bound states of Mn ²²⁺ and Co ²²⁺ . <i>Chemical Physics Letters</i> , 2003 , 372, 82-89	2.5	5
115	A density-functional study on the formation of Mo(2) ²⁺ . <i>Journal of Chemical Physics</i> , 2005 , 123, 134313	3.9	5
114	BeB ₂ nanostructures: A density functional study. <i>Physical Review B</i> , 2005 , 72,	3.3	5
113	Stability of a Sn ₄ tetrahedral cluster in an alkali atom environment. <i>Physical Review B</i> , 2002 , 65,	3.3	5
112	Potential energy curve of H ⁺ + 2 related to mirror-plane ground-state electron density. <i>Molecular Physics</i> , 1993 , 79, 1143-1146	1.7	5
111	Photoabsorption cross sections of sodium clusters: electronic and geometrical effects. <i>Zeitschrift für Physik D-Atoms Molecules and Clusters</i> , 1993 , 26, 284-286		5
110	Electronic structure and stability of K _x Mg clusters. Comparison between the jellium-on-jellium model and an improved model. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1989 , 140, 67-71	2.3	5
109	Density functional theory of the chemical potential of atoms and its relation to electrostatic potentials and bonding distances. <i>Zeitschrift für Physik D-Atoms Molecules and Clusters</i> , 1986 , 1, 215-221		5
108	Determination of phase diagrams of eutectic binary alloys with partial solid solubility. <i>Physica B: Condensed Matter</i> , 1988 , 154, 82-86	2.8	5

107	Size effects on the vacancy-formation energy of small sodium clusters in the jellium model. <i>Physical Review B</i> , 1988 , 37, 8436-8439	3.3	5
106	Density functional pseudopotential calculation of the cohesive properties of disordered solid alloys of nontransition metals application to Zn ₁₀₀ . <i>Physica Status Solidi (B): Basic Research</i> , 1983 , 119, 589-594	1.3	5
105	Density functional calculation of the electronegativity and other related properties of atoms and ions of the principal groups of the periodic table. <i>Zeitschrift Für Physik A</i> , 1984 , 319, 275-282		5
104	On the chemical potential of atomic ions. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1984 , 101, 20-22	2.3	5
103	A note on the entropy of mixing of liquid sodium-caesium and other binary alkali alloys. <i>Journal of Physics F: Metal Physics</i> , 1985 , 15, L185-L188		5
102	Concentration fluctuations in simple metallic liquid alloys. <i>Physica B: Physics of Condensed Matter & C: Atomic, Molecular and Plasma Physics, Optics</i> , 1982 , 114, 67-70		5
101	Optical Absorption Spectra of V+4 Isomers: One Example of First-Principles Theoretical Spectroscopy with Time-Dependent Density Functional Theory. <i>Journal of Computational and Theoretical Nanoscience</i> , 2006 , 3, 761-766	0.3	5
100	Bimetallic Al-Sn clusters: mixing at the nanoscale. <i>Physical Chemistry Chemical Physics</i> , 2019 , 21, 22919-22929	3.2	5
99	Hydrogen Chemical Configuration and Thermal Stability in Tungsten Disulfide Nanoparticles Exposed to Hydrogen Plasma. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 11747-11756	3.8	4
98	Electrostrictive deformations in small carbon clusters, hydrocarbon molecules, and carbon nanotubes. <i>Physical Review A</i> , 2006 , 74,	2.6	4
97	Semi-empirical model for the fission of multiply charged metal clusters. <i>Zeitschrift Für Physik D-Atoms Molecules and Clusters</i> , 1995 , 33, 301-305		4
96	Charge transfer within clusters in liquid ionic alloys. <i>Journal of Physics Condensed Matter</i> , 1993 , 5, 4271-4282	4.2	4
95	Electronic and atomic structure of simple-metal clusters: Beyond the spherical jellium model 1992 , 327-334		4
94	A hard-sphere description of the thermodynamic properties of binary mixtures of organic molecules. <i>Chemical Physics</i> , 1986 , 103, 35-42	2.3	4
93	Correlation of Glass Forming Ability with Thermochemical Coordinates*. <i>Zeitschrift Fur Physikalische Chemie</i> , 1988 , 156, 109-113	3.1	4
92	Density functional theory of asymptotic form of electron density in heteronuclear diatomic molecules. <i>Journal of Chemical Physics</i> , 1983 , 79, 1903-1905	3.9	4
91	Liquidus Curves of Eutectic NaK and NaCs Systems. <i>Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences</i> , 1984 , 39, 842-845	1.4	4
90	Role of the Excess Volume of Formation on Alloying. <i>Physica Status Solidi (B): Basic Research</i> , 1984 , 123, 485-489	1.3	4

89	Relation of Regular Solution Theory of Liquid Metal Alloys to Miedemals Work. <i>Physics and Chemistry of Liquids</i> , 1981 , 11, 135-139	1.5	4
88	Surface dipole barrier in metals. Relation to the bulk electron density. <i>Zeitschrift für Physik B Condensed Matter and Quanta</i> , 1981 , 40, 307-309		4
87	Density functional-pseudopotential calculation of the heat of formation of disordered solid alkaline-earth alloys. <i>Physica B: Physics of Condensed Matter & C: Atomic, Molecular and Plasma Physics, Optics</i> , 1982 , 112, 73-77		4
86	Dimerization of pentacyclopentacorannulene CH as a strategy to produce CH as a precursor for C.. <i>RSC Advances</i> , 2020 , 10, 3689-3693	3.7	3
85	Reactivity of Cobalt-Fullerene Complexes towards Deuterium. <i>ChemPhysChem</i> , 2020 , 21, 1012-1018	3.2	3
84	Semiempirical fine-tuning for Hartree-Fock ionization potentials of atomic ions with non-integral atomic number. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2013 , 377, 2955-2958	2.3	3
83	Some properties of the structure factor S(q) in two-dimensional classical liquids near freezing. <i>Physics and Chemistry of Liquids</i> , 2010 , 48, 409-413	1.5	3
82	Density functional study of atomic electron affinities using a nonlocal exchange and a local correlation functional. <i>International Journal of Quantum Chemistry</i> , 1997 , 61, 253-261	2.1	3
81	Mixed lead-alkali clusters in the gas phase and in liquid alloys. <i>International Journal of Quantum Chemistry</i> , 1998 , 69, 341-348	2.1	3
80	Metastable states in Au ²²⁺ : a density functional study. <i>Computational and Theoretical Chemistry</i> , 2003 , 639, 203-211		3
79	Some Properties of a Model Liquid of C 60 Buckyballs. <i>Physics and Chemistry of Liquids</i> , 2002 , 40, 457-467	1.5	3
78	Electrostatic potential at the nucleus of a neutral atom related to electronic correlation energies of atomic ions. <i>Molecular Physics</i> , 1996 , 88, 1365-1371	1.7	3
77	ON THE FISSION OF CHARGED ALKALI-METAL CLUSTERS. <i>Surface Review and Letters</i> , 1996 , 03, 617-621	1.1	3
76	Molecular dynamics study of A18B Lennard-Jones clusters. <i>Zeitschrift für Physik D-Atoms Molecules and Clusters</i> , 1994 , 31, 299-301		3
75	Evaporation rates of hot sodium clusters. <i>Zeitschrift für Physik D-Atoms Molecules and Clusters</i> , 1991 , 20, 119-122		3
74	Vacancy Formation Energy in Close-packed Metals Connected with Liquid Thermodynamics at Melting. <i>Physics and Chemistry of Liquids</i> , 1989 , 20, 235-240	1.5	3
73	Electron density and atomic relaxation around a vacancy in a small metal particle. <i>Zeitschrift für Physik D-Atoms Molecules and Clusters</i> , 1986 , 2, 177-181		3
72	Relation between total energy, electronic potential at the nucleus, and chemical potential of positive ions. <i>International Journal of Quantum Chemistry</i> , 1984 , 26, 145-149	2.1	3

71	Solubility in nontransition homovalent alloys. Relation to the ionic radius. <i>Physica B: Physics of Condensed Matter & C: Atomic, Molecular and Plasma Physics, Optics</i> , 1981 , 103, 333-339		3
70	The virial, boundary kinetic-energy density and electron density, in one dimension and in spherical symmetry. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1981 , 83, 455-456	2.3	3
69	Cellular density functional theory of the heat of formation of disordered simple alloys. <i>Physica Status Solidi (B): Basic Research</i> , 1982 , 114, 495-501	1.3	3
68	Ab initio study of (NaCl) _n Na ⁺ clusters. <i>Canadian Journal of Physics</i> , 1998 , 76, 311-320	1.1	3
67	Interaction of hydrogen with palladium-copper nanoalloys. <i>Theoretical Chemistry Accounts</i> , 2021 , 140, 1	1.9	3
66	Modelling of adsorption and intercalation of hydrogen on/into tungsten disulphide multilayers and multiwall nanotubes. <i>Physical Chemistry Chemical Physics</i> , 2018 , 20, 12061-12074	3.6	2
65	Protophilicity index and protofelicity equalization principle: new measures of Brønsted-Lowry-Lewis acid-base interactions. <i>Journal of Molecular Modeling</i> , 2013 , 19, 3961-7	2	2
64	Evolution of the atomic structure and the magnetism of small oxygen clusters. <i>Computational and Theoretical Chemistry</i> , 2013 , 1021, 215-221	2	2
63	High-pressure behaviour of crystalline silane compared with that for SnH ₄ . <i>Phase Transitions</i> , 2009 , 82, 247-250	1.3	2
62	Density functional pseudopotential study of the endohedral complex Li ₂ @C ₆₀ . <i>Physica B: Condensed Matter</i> , 1997 , 240, 154-166	2.8	2
61	Relativistic theory of an inhomogeneous electron liquid in relation to atomic binding energies. <i>Physics and Chemistry of Liquids</i> , 2004 , 42, 589-595	1.5	2
60	Behavior of the Surface Tension and the Viscosity in the Eutectic region of the Liquid Fe-B alloy. <i>Physics and Chemistry of Liquids</i> , 2002 , 40, 57-65	1.5	2
59	Nonlocal functionals for exchange and correlation in density functional theory: Application to atoms and to small atomic clusters. <i>International Journal of Quantum Chemistry</i> , 1995 , 56, 499-508	2.1	2
58	Behaviour of the ionization potential at the closing of atomic shells in large b.c.c.-like spherical sodium clusters. <i>Solid State Communications</i> , 1995 , 94, 799-803	1.6	2
57	Hardness of metallic clusters 1993 , 229-257		2
56	Asymmetric rare gas pair potentials from energy density functionals. <i>Journal of Chemical Physics</i> , 1986 , 85, 6637-6644	3.9	2
55	Fragmentation channels of neutral and charged sodium clusters. <i>Physica B: Physics of Condensed Matter & C: Atomic, Molecular and Plasma Physics, Optics</i> , 1988 , 147, 243-248		2
54	Relation between total energy, electronic potential at the nucleus and chemical potential. Application to the helium isoelectronic series in Hartree-Fock theory. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1983 , 95, 89-91	2.3	2

53	Concentration Fluctuations in Liquid Sodium-Caesium Alloys. <i>Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences</i> , 1984 , 39, 596-599	1.4	2
52	Density Functional Pseudopotential Calculation of the Cohesive Properties of Disordered Solid Alloys of Alkaline-Earth Metals. Influence of the Ionic Pseudopotential. <i>Physica Status Solidi (B): Basic Research</i> , 1985 , 129, 483-488	1.3	2
51	Liquidus Curves of Eutectic Na?K and Na?Cs Systems from Semiempirical Theories of Mixtures. <i>Physica Status Solidi A</i> , 1985 , 89, 73-78		2
50	Concentration Fluctuations in Binary Mixtures of Inert-Gas Fluids. <i>Physics and Chemistry of Liquids</i> , 1985 , 15, 41-48	1.5	2
49	A comparison of two parametrizations of solid solubility in alloys: Thermochemical coordinates versus orbital radii coordinates. <i>Physica B: Physics of Condensed Matter & C: Atomic, Molecular and Plasma Physics, Optics</i> , 1982 , 113, 103-112		2
48	ELECTRONIC SHELL EFFECTS IN METAL CLUSTERS AND THEIR CONSEQUENCES FOR CLUSTER SELF-ASSEMBLING 2002 , 1476-1507		2
47	Fragmentation of Doubly Charged Alkali-Metal Clusters. <i>Springer Series in Nuclear and Particle Physics</i> , 1992 , 305-311		2
46	Prediction of Metastable Alloy Formation and Phase Transformations Induced by Ion Bombardment in Binary Metal Systems 1992 , 328-335		2
45	PREDICTION OF GLASS FORMATION BY SOLID STATE REACTION IN ALLOYS. <i>Journal De Physique Colloque</i> , 1990 , 51, C4-111-C4-117		2
44	Electronic and Atomic Structure of NanZn Clusters in the Spherically Averaged Pseudopotential Model 1991 , 373-386		2
43	Hydrogen quenches the size effects in carbon clusters. <i>Physical Chemistry Chemical Physics</i> , 2019 , 21, 10402-10410	3.6	1
42	The diatomic dication SiC2+ in the gas phase. <i>Chemical Physics</i> , 2015 , 455, 41-47	2.3	1
41	Metallicity enhancement in core-shell SiO2@RuO2 nanowires. <i>RSC Advances</i> , 2014 , 4, 34696-34700	3.7	1
40	Transport coefficients in the strongly coupled liquid alkali metals. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2013 , 377, 810-812	2.3	1
39	Properties of glass-forming metallic liquids: when is there a hard-sphere-like behaviour?. <i>Physics and Chemistry of Liquids</i> , 2009 , 47, 585-598	1.5	1
38	Temperature dependence of the liquid structure factor of dense monatomic fluids in the long wavelength limit in relation to thermal expansivity. <i>Philosophical Magazine Letters</i> , 2012 , 92, 133-135	1	1
37	Phenomenology of Metallic Resistivity Observed in Single-Wall Nanotube Ropes as a Strongly Coupled Electron C Ion Plasma. <i>Physica Status Solidi (B): Basic Research</i> , 1997 , 203, 179-182	1.3	1
36	Gradient correction to the exchange pair-correlation function of the weighted spin-density approximation in the density functional formalism. <i>Chemical Physics Letters</i> , 1998 , 296, 307-312	2.5	1

35	Ab initio molecular dynamics simulations of the two-step melting of NaSn. <i>Physical Review B</i> , 2003 , 68,	3.3	1
34	Octet composition in alkali-Pb solid alloys. <i>Physical Review B</i> , 2002 , 66,	3.3	1
33	New perspectives of the weighted spin-density approximation: gradient corrections and the valence-only approach. <i>Computational and Theoretical Chemistry</i> , 2000 , 501-502, 153-166		1
32	Screening of an Ion in a Finite Electron Gas and its Relation to Cluster Structure. <i>Physics and Chemistry of Liquids</i> , 1995 , 29, 23-30	1.5	1
31	Construction of liquidus curves of simple-eutectic binary alloys from Miedema theory. <i>Physica B: Physics of Condensed Matter & C: Atomic, Molecular and Plasma Physics, Optics</i> , 1988 , 150, 369-377		1
30	On the free energy of mixing of a binary liquid alloy. <i>Physics and Chemistry of Liquids</i> , 1983 , 12, 265-268	1.5	1
29	Partial pressure contributions to the equation of state of alkaline-earth metals. <i>Physica B: Physics of Condensed Matter & C: Atomic, Molecular and Plasma Physics, Optics</i> , 1982 , 112, 67-72		1
28	On the derivation of the Schrödinger equation from Newtonian mechanics. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1972 , 38, 501-502	2.3	1
27	C60Con complexes as hydrogen adsorbing materials. <i>International Journal of Hydrogen Energy</i> , 2021 , 46, 20594-20606	6.7	1
26	Absence of spillover of hydrogen adsorbed on small palladium clusters anchored to graphene vacancies. <i>Applied Surface Science</i> , 2021 , 559, 149835	6.7	1
25	Structure, stability, and optical absorption spectra of small TinCx clusters: a first-principles approach. <i>Monthly Notices of the Royal Astronomical Society</i> ,	4.3	1
24	Theoretical Study of the Metal-Nonmetal Transition in Transition Metal Clusters 1998 , 109-117		1
23	Elimination vs substitution reaction. A dichotomy between Brønsted-Lowry and Lewis basicity. <i>Organic Letters</i> , 2015 , 17, 767-9	6.2	0
22	Magnetic Properties of Atomic Clusters of the Transition Elements. <i>Reviews in Computational Chemistry</i> , 2007 , 191-248		0
21	Adsorption of transition metal clusters on Boron-graphdiyne. <i>Applied Surface Science</i> , 2021 , 548, 1492706.	6.7	0
20	Interaction of Hydrogen with Graphitic Surfaces, Clean and Doped with Metal Clusters 2018 , 1-22		
19	Ornstein-Zernike direct correlation function from diffraction experiments in supercooled liquid silicon and in disordered cobalt. <i>Physics and Chemistry of Liquids</i> , 2012 , 50, 131-136	1.5	
18	Density functional study of low-lying isomers of SiO4, GeO4 and CO4, and their relation to tetrahedral solid phases. <i>European Physical Journal D</i> , 2012 , 66, 1	1.3	

- 17 Comment on "The diatomic dication CuZn^{2+} in the gas phase" [J. Chem. Phys. 135, 034306 (2011)].
Journal of Chemical Physics, **2013**, 138, 077101 3.9
- 16 Magnetic interactions between small Ni clusters. *Solid State Communications*, **2000**, 116, 309-314 1.6
- 15 Clusters of Fullerene Molecules. *Materials Science Forum*, **1996**, 232, 155-172 0.4
- 14 Atomic structure of metallic clusters of medium size. *International Journal of Modern Physics B*,
1992, 06, 3613-3621 1.1
- 13 Simple model for liquid metal alloys and relation to Miedemals variables. *Physica B: Physics of
Condensed Matter & C: Atomic, Molecular and Plasma Physics, Optics*, **1982**, 114, 141-146
- 12 Interaction of Hydrogen with Graphitic Surfaces, Clean and Doped with Metal Clusters **2020**, 545-566
- 11 Dissociation of doubly-charged alkali-metal clusters **1992**, 112-117
- 10 Density approximation to the average Hartree-Fock exchange potential for atoms. *Journal of
Chemical Sciences*, **1994**, 106, 91-102 1.8
- 9 Enrichment and segregation in alkali heteroclusters **1989**, 237-239
- 8 Evaporation rates of hot sodium clusters **1991**, 569-572
- 7 Fission barriers for $\text{Na N } 2+$ cluster dissociation **1995**, 231-234
- 6 Theoretical Study of the Collective Electronic Excitations of the Endohedral Clusters NaN@C_{780}
1998, 133-141
- 5 Electronic Structure of Bimetallic Clusters Based on Alkali Elements. *Springer Series in Cluster
Physics*, **1999**, 255-276
- 4 Density Functional Calculation of the Fragmentation of Neutral, Singly and Doubly-Ionized
Spherical Jellium-Like Metallic Microparticles **1987**, 263-267
- 3 Computer Simulations of the Structure of Nanoporous Carbons and Higher Density Phases of
Carbon **2018**, 21-34
- 2 Concentration Fluctuations in Liquid Alloys of Alkali Metals from Semiempirical Theories of
Mixtures. *Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences*, **1985**, 40, 425-429 1.4
- 1 Symmetric and asymmetric fission of charged sodium clusters. *Acta Physica Hungarica A Heavy Ion
Physics*, **1995**, 1, 227-240