## Régis Bisson

## List of Publications by Year in descending order

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Version: 2024-02-01

430874 395702 1,099 42 18 33 citations g-index h-index papers 43 43 43 983 docs citations times ranked citing authors all docs

#	Article	IF	CITATIONS
1	Steric Effects in the Chemisorption of Vibrationally Excited Methane on Ni(100). Science, 2010, 329, 553-556.	12.6	138
2	State-Resolved Reactivity of CH4(2ν3) on Pt(111) and Ni(111): Effects of Barrier Height and Transition State Locationâ€. Journal of Physical Chemistry A, 2007, 111, 12679-12683.	2.5	102
3	Plasma–wall interaction studies within the EUROfusion consortium: progress on plasma-facing components development and qualification. Nuclear Fusion, 2017, 57, 116041.	3.5	75
4	Vibrationally bond-selected chemisorption of methane isotopologues on Pt(111) studied by reflection absorption infrared spectroscopy. Faraday Discussions, 2012, 157, 285.	3.2	68
5	Macroscopic rate equation modeling of trapping/detrapping of hydrogen isotopes in tungsten materials. Journal of Nuclear Materials, 2015, 467, 424-431.	2.7	59
6	The temperature dependence of optical properties of tungsten in the visible and near-infrared domains: an experimental and theoretical study. Journal Physics D: Applied Physics, 2017, 50, 455601.	2.8	56
7	Mode-specific reactivity of <mml:math inline"="" xmins:mml="http://www.w3.org/1998/Math/Math/Math/Mi&lt;br&gt;display="><mml:mrow><mml:mrow><mml:mrow><mml:mtext>CH</mml:mtext></mml:mrow><mml:mn xmlns:mml="http://www.w3.org/1998/Math/MathML"</mml:mn </mml:mrow></mml:mrow></mml:math>	>4 <td>nn&gt;</td>	nn>

#	Article	IF	CITATIONS
19	The sticking probability of D2O-water on ice: Isotope effects and the influence of vibrational excitation. Journal of Chemical Physics, 2012, 137, 074701.	3.0	18
20	Tritium retention in W plasma-facing materials: Impact of the material structure and helium irradiation. Nuclear Materials and Energy, 2019, 19, 403-410.	1.3	17
21	Reversible hydrogenation of deuterium-intercalated quasi-free-standing graphene on SiC(0001). Physical Review B, 2012, 85, .	3.2	15
22	Estimation of the tritium retention in ITER tungsten divertor target using macroscopic rate equations simulations. Physica Scripta, 2017, T170, 014033.	2.5	15
23	Hydrogen trapping in tungsten: impact of helium irradiation and thermal cycling. Physica Scripta, 2020, T171, 014066.	2.5	13
24	Surface oxygen versus native oxide on tungsten: contrasting effects on deuterium retention and release. Nuclear Fusion, 2022, 62, 054002.	3.5	12
25	Angle-resolved study of hydrogen abstraction on $Si(100)$ and $Si(111)$ : Evidence for non-activated pathways. Surface Science, 2006, 600, 4454-4463.	1.9	11
26	Hydrogenated graphene on $Ir(111)$ : A high-resolution electron energy loss spectroscopy study of the vibrational spectrum. Physical Review B, 2016, 93, .	3.2	11
27	Comparison of dynamic deuterium retention in single-crystal and poly-crystals of tungsten: The role of natural defects. Nuclear Instruments & Methods in Physics Research B, 2019, 461, 159-165.	1.4	9
28	Long discharges in a steady state with D <sub>2</sub> and N <sub>2</sub> on the actively cooled tungsten upper divertor in WEST. Nuclear Fusion, 2020, 60, 126046.	3.5	9
29	Patterned formation of enolate functional groups on the graphene basal plane. Physical Chemistry Chemical Physics, 2018, 20, 28370-28374.	2.8	8
30	Deuterium adsorption on (and desorption from) SiC( $0\hat{a}\in\%0\hat{a}\in\%0\hat{a}\in\%1$ )-(3 $\tilde{A}=3$ ), \$(sqrt{sf 3} imes sqrt {sf) graphene obtained by hydrogen intercalation. Journal Physics D: Applied Physics, 2014, 47, 094014.	Tj ETQq0 C 2.8	0 rgBT /Over 7
31	Sticking Probability of Ammonia Molecules on Tungsten and 316L Stainless Steel Surfaces. Journal of Physical Chemistry C, 2020, 124, 17566-17577.	3.1	7
32	The effect of surface temperature on optical properties of molybdenum mirrors in the visible and near-infrared domains. Nuclear Fusion, 2018, 58, 096012.	3.5	5
33	Deuterium and helium outgassing following plasma discharges in WEST: Delayed D outgassing during D-to-He changeover experiments studied with threshold ionization mass spectrometry. Nuclear Materials and Energy, 2021, 26, 100885.	1.3	5
34	The role of defects, deuterium, and surface morphology on the optical response of beryllium. Nuclear Fusion, 0, , .	3.5	5
35	Non-activated pathway in angle-resolved study of H2 molecules produced in the abstraction reaction of incident H atoms on hydrogenated Si(100). Chemical Physics Letters, 2005, 411, 429-433.	2.6	4
36	Cavity ring-down spectroscopy of jet-cooled silane isotopologues in the Si–H stretch overtone region. Journal of Chemical Physics, 2007, 127, 244301.	3.0	4

#	Article	IF	CITATION
37	Nitrogen retention and ammonia production on tungsten. Nuclear Fusion, 2021, 61, 126067.	3.5	4
38	Mixed (Ar) $\frac{-n}{s} (N \frac{-2}{s}) $ (N $\frac{-2}{s}$ ) $\frac{-2}{s}$ wan der Waals clusters created by pick-up technique. European Physical Journal D, 2004, 28, 367-372.	1.3	2
39	Comment on "Angular distributions of H-induced HD and D2 desorptions from the Si(100) surfaces―[J. Chem. Phys. 124, 054715 (2006)]. Journal of Chemical Physics, 2008, 128, 017101.	3.0	2
40	Laser remote heating in vacuum environment to study temperature dependence of optical properties for bulk materials. , $2016, \ldots$		2
41	Blistering and hydrogen retention in poly- and single- crystals of aluminum by a joint experimental-modeling approach. Nuclear Materials and Energy, 2019, 20, 100675.	1.3	2
42	Optical Properties of Tungsten: A Parametric Study to Characterize the Role of Roughness, Surface Composition and Temperature. Optics, 2022, 3, 216-224.	1.2	0