

Stefan C Badescu

List of Publications by Year in descending order

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47

papers

3,385

citations

535685

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docs citations

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times ranked

6174

citing authors

#	ARTICLE	IF	CITATIONS
1	Coherent Population Trapping Combined with Cycling Transitions for Quantum Dot Hole Spins Using Triplet Trion States. <i>Physical Review Letters</i> , 2021, 126, 107401.	2.9	9
2	Quantum magnetoconductivity characterization of interface disorder in indium-tin-oxide films on fused silica. <i>Communications Materials</i> , 2021, 2, .	2.9	1
3	Residual stress analysis of aluminum nitride piezoelectric micromachined ultrasonic transducers using Raman spectroscopy. <i>Journal of Applied Physics</i> , 2021, 130, .	1.1	6
4	Homoepitaxial $\hat{\ell}^2$ -Ga ₂ O ₃ transparent conducting oxide with conductivity $f = 2323 \text{ S cm}^{-1}$. <i>APL Materials</i> , 2021, 9, .	2.2	22
5	Electrical and optical properties of degenerate and semi-insulating ZnGa ₂ O ₄ : Electron/phonon scattering elucidated by quantum magnetoconductivity. <i>Applied Physics Letters</i> , 2020, 116, 252104.	1.5	6
6	Electron-phonon coupling and electron mobility in degenerately doped oxides from first-principles. <i>Optical Engineering</i> , 2020, 59, 1.	0.5	1
7	Vicinal metal surfaces as potential catalysts for phosphorene epitaxial growth. <i>Applied Physics Letters</i> , 2019, 115, .	1.5	1
8	Density functional tight binding study of $\hat{\ell}^2$ -Ga ₂ O ₃ : Electronic structure, surface energy, and native point defects. <i>Journal of Chemical Physics</i> , 2019, 150, 174706.	1.2	14
9	A Computational and Experimental Investigation of the Phonon and Optical Properties of Au ₂ P ₃ . <i>Materials</i> , 2019, 12, 555.	1.3	4
10	Extended band anti-crossing model for dilute bismides. <i>Applied Physics Letters</i> , 2018, 112, .	1.5	8
11	Evaluation of Dilute Bismide Materials for Mid-IR Applications. , 2018, , .	0	
12	Electronic transport in degenerate (100) scandium nitride thin films on magnesium oxide substrates. <i>Applied Physics Letters</i> , 2018, 113, .	1.5	16
13	Auger losses in dilute InAsBi. <i>Applied Physics Letters</i> , 2018, 112, .	1.5	9
14	Heterogeneous Pyrolysis: A Route for Epitaxial Growth of hBN Atomic Layers on Copper Using Separate Boron and Nitrogen Precursors. <i>Nano Letters</i> , 2017, 17, 2404-2413.	4.5	21
15	Valence band splitting in bulk dilute bismides. <i>Applied Physics Letters</i> , 2017, 111, 182103.	1.5	7
16	Simultaneous measurement of temperature, stress, and electric field in GaN HEMTs with micro-Raman spectroscopy. <i>Review of Scientific Instruments</i> , 2017, 88, 113111.	0.6	51
17	Configuration dependence of band-gap narrowing and localization in dilute Ga_{As} Physical Review B, 2016, 93, .	1	
18	Composition determination of $\hat{\ell}^2$ -(Al _x Ga _{1-x}) _{Tj} ETQq0 0 0 rgBT /Overlock 10 Tf 50 72 Td (_x) ₂ -Ga ₂ O ₃ substrates by high-resolution X-ray diffraction. <i>Applied Physics Express</i> , 2016, 9, 061102.	1.1	90

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19	Microscopic modelling of opto-electronic properties of dilute bismide materials for the mid-IR. , 2016, , .	1	
20	Optical Measurement and Modeling of Interactions between Two Hole Spins or Two Electron Spins in Coupled InAs Quantum Dots. Physical Review Letters, 2013, 110, 117402.	2.9	13
21	Properties of Fluorinated Graphene Films. Nano Letters, 2010, 10, 3001-3005.	4.5	980
22	The role of the electron-hole exchange in the spin mixing of excited-shell excitons in quantum dots. , 2010, , .	0	
23	Electron spin polarization and detection in InAs quantum dots through< mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>p</mml:mi></mml:math>-shell trions. Physical Review B, 2010, 81, .	1.1	10
24	Adsorption of nitro-substituted aromatics on single-walled carbon nanotubes. Physical Review B, 2010, 82, .	1.1	13
25	Optical Spin Initialization and Nondestructive Measurement in a Quantum Dot Molecule. , 2009, , .	0	
26	Metalâ€“adsorbate hybridized electronic states and their impact on surface enhanced Raman scattering. Chemical Physics Letters, 2009, 477, 144-149.	1.2	24
27	Adsorption of linear chain molecules on carbon nanotubes. Physical Review B, 2008, 78, .	1.1	14
28	Optical Spin Initialization and Nondestructive Measurement in a Quantum Dot Molecule. Physical Review Letters, 2008, 101, 236804.	2.9	82
29	Mixing of two-electron spin states in a semiconductor quantum dot. Physical Review B, 2007, 75, .	1.1	8
30	The role of surface adsorption in surface-enhanced Raman scattering from Benzene thiols. , 2007, , .	0	
31	Spin mixing of two electrons in a quantum dot. AIP Conference Proceedings, 2007, , .	0.3	0
32	Dielectric and geometric properties of plasmonics in metal/dielectric nanowires composites used in surface-enhanced Raman spectroscopy. Proceedings of SPIE, 2007, , .	0.8	0
33	Adsorption of simple benzene derivatives on carbon nanotubes. Physical Review B, 2007, 75, .	1.1	195
34	Spin interactions in InAs quantum dots and molecules. Physica Status Solidi (B): Basic Research, 2006, 243, 3859-3863.	0.7	2
35	Theory of spin states in coupled quantum dots. Physica Status Solidi (B): Basic Research, 2006, 243, 3869-3873.	0.7	8
36	Role of Defects in Single-Walled Carbon Nanotube Chemical Sensors. Nano Letters, 2006, 6, 1747-1751.	4.5	427

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37	Anisotropic exchange interaction in coupled semiconductor quantum dots. AIP Conference Proceedings, 2005, ,.	0.3	1
38	Asymmetric exchange between electron spins in coupled semiconductor quantum dots. Physical Review B, 2005, 72, .	1.1	22
39	Polarized Fine Structure in the Photoluminescence Excitation Spectrum of a Negatively Charged Quantum Dot. Physical Review Letters, 2005, 95, 177403.	2.9	122
40	Chemical Detection with a Single-Walled Carbon Nanotube Capacitor. Science, 2005, 307, 1942-1945.	6.0	907
41	Adsorption and diffusion on a stepped surface: Atomic hydrogen on Pt(211). Journal of Chemical Physics, 2004, 120, 11852-11863.	1.2	65
42	Vibrational states of a H monolayer on the Pt(111) surface. Physical Review B, 2003, 68, .	1.1	58
43	Energetics and Vibrational States for Hydrogen on Pt(111). Physical Review Letters, 2002, 88, 136101.	2.9	105
44	Quantum Diffusion of H/Ni(111) through a Monte Carlo Wave Function Formalism. Physical Review Letters, 2001, 86, 5092-5095.	2.9	20
45	On interactions in a driven array of magnetic domain walls. Sensors and Actuators A: Physical, 2000, 81, 244-247.	2.0	0
46	Modeling the nonlinear dynamics of magnetic domain walls. Journal of Magnetism and Magnetic Materials, 1999, 193, 132-135.	1.0	7
47	On the chaotic oscillations of Bloch walls and their control. Chaos, Solitons and Fractals, 1997, 8, 33-43.	2.5	4